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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C09K 19/56, 19/52, 19/00	A1	(11) International Publication Number: WO 98/31772 (43) International Publication Date: 23 July 1998 (23.07.98)
(21) International Application Number: PCT/US98/01195 (22) International Filing Date: 21 January 1998 (21.01.98) (30) Priority Data: 60/034,966 21 January 1997 (21.01.97) US 60/050,765 25 June 1997 (25.06.97) US (71) Applicant (for all designated States except US): CASE WEST-ERN RESERVE UNIVERSITY [US/US]; 10900 Euclid Avenue, Cleveland, OH 44106 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): PETSCHKE, Rolfe, G. [US/US]; 2866 Woodbury Road, Shaker Heights, OH 44120 (US). HARRISON, Daniel [US/US]; 3244 East Fairfax Road #3, Cleveland Heights, OH 44118 (US). FISCH, Michael [US/US]; 17437 Edgewater Drive, Lakewood, OH 44107 (US). (74) Agent: MINNICH, Richard, J.; Fay, Sharpe, Beall, Fagan, Minnich & McKee, 7th floor, 1100 Superior Avenue, Cleveland, OH 44114-2518 (US).		(81) Designated States: AL, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GH, GM, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: BUFF-FREE LIQUID CRYSTAL ALIGNMENT USING POLY(IONOMER) COATINGS (57) Abstract The present invention consists of materials and a processing method for coating rigid-rod poly(ionomers) or salts thereof, in a solvent system, directionally on charged surfaces resulting in the formation of liquid crystal display surfaces with planar alignment and pretilt.		